

Title (en)

APPARATUS FOR SIGNALING OF CONTROL MESSAGES FOR FRONTHAUL INTERFACE

Title (de)

VORRICHTUNG ZUR SIGNALISIERUNG VON STEUERUNGSNACHRICHTEN FÜR EINE FRONTHAUL-SCHNITTSTELLE

Title (fr)

APPAREIL DE SIGNALISATION DE MESSAGES DE COMMANDE POUR INTERFACE FRONTHAUL

Publication

EP 4231729 A1 20230823 (EN)

Application

EP 23175193 A 20191017

Priority

- US 201862746795 P 20181017
- US 201916599939 A 20191011
- EP 19873164 A 20191017
- KR 2019013629 W 20191017

Abstract (en)

A transmitter device and a receiver device in a base station in a wireless communication system, and corresponding methods, are provided, the transmitter device comprising:a transceiver; and at least one processor operably connected to the transceiver, the at least one processor configured to:generate a downlink and uplink (DL/UL) control message including a section extension type field, a resource element (RE) mask field and a scale field and transmit the DL/LUL control message via a fronthaul interface of the base station,wherein the section extension type field indicates a section extension type for at least one set of REs in a physical resource block (PRB), wherein REs in a set of REs use same power scaling,wherein the RE mask field indicates a position of REs in the set of REs, and wherein the scale field indicates a power scaling value used for the set of REs.

IPC 8 full level

H04W 52/16 (2009.01); **H04W 52/26** (2009.01); **H04W 52/58** (2009.01); **H04W 88/08** (2009.01)

CPC (source: CN EP KR US)

H04L 5/0053 (2013.01 - KR); **H04L 27/3444** (2013.01 - KR); **H04W 52/06** (2013.01 - KR US); **H04W 52/16** (2013.01 - EP);
H04W 52/262 (2013.01 - EP); **H04W 52/52** (2013.01 - US); **H04W 52/58** (2013.01 - EP); **H04W 52/60** (2013.01 - US);
H04W 72/1268 (2013.01 - CN); **H04W 72/1273** (2013.01 - CN); **H04W 72/20** (2023.01 - US); **H04W 72/21** (2023.01 - CN);
H04W 72/23 (2023.01 - CN); **H04W 88/085** (2013.01 - KR); **H04W 92/04** (2013.01 - KR); **H04W 88/085** (2013.01 - EP); **Y02D 30/70** (2020.08 - EP)

Citation (applicant)

- XRAN FRONTHAUL WORKING GROUP: "XRAN-FH.CUS.0-v02.01", CONTROL, USER AND SYNCHRONIZATION PLANE SPECIFICATION
- O-RAN FRONTHAUL WORKING GROUP: "ORAN-WG4.CUS.0-v01.00", CONTROL, USER AND SYNCHRONIZATION PLANE SPECIFICATION

Citation (search report)

- [A] CPRI: "Common Public Radio Interface: eCPRI Interface Specification", 25 June 2018 (2018-06-25), pages 1 - 62, XP055854267, Retrieved from the Internet <URL:http://www.cpri.info/downloads/eCPRI_v_1_2_2018_06_25.pdf> [retrieved on 20211025]
- [A] ERICSSON ET AL: "CPRI Specification V6.1 (2014-07-01) Common Public Radio Interface (CPRI); Interface Specification", 1 July 2014 (2014-07-01), XP055312785, Retrieved from the Internet <URL:http://www.cpri.info/downloads/CPRI_v_6_1_2014-07-01.pdf> [retrieved on 20161020]
- [XP] O-RAN FRONTHAUL WORKING GROUP 4: "Control, User and Synchronization Plane Specification", INTERNET CITATION, 2 August 2019 (2019-08-02), pages 1 - 218, XP009527536, Retrieved from the Internet <URL:<https://www.o-ran.org/specification-access>>

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 10791527 B2 20200929; US 2020128496 A1 20200423; CN 112868200 A 20210528; CN 112868200 B 20241018;
CN 116709536 A 20230905; EP 3847777 A1 20210714; EP 3847777 A4 20211201; EP 3847777 B1 20240110; EP 3847777 C0 20240110;
EP 4231729 A1 20230823; KR 102472615 B1 20221130; KR 102543727 B1 20230615; KR 102602649 B1 20231116;
KR 20210043714 A 20210421; KR 20220164806 A 20221213; KR 20230093064 A 20230626; WO 2020080838 A1 20200423

DOCDB simple family (application)

US 201916599939 A 20191011; CN 201980069049 A 20191017; CN 202310594131 A 20191017; EP 19873164 A 20191017;
EP 23175193 A 20191017; KR 2019013629 W 20191017; KR 20217010256 A 20191017; KR 20227041599 A 20191017;
KR 20237019616 A 20191017